

Historical review of a cabinet of Coleoptera from Thomas George Bishop's collection connected with James Francis Stephens

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A near derelict cabinet containing beetles was acquired by one of us (RMD) in the late 1980s and restored to an acceptable, if not pristine, state. It appeared to have been abandoned and was bought from the then Department of Zoology mainly to provide storage space but also to act as a resource for identification purposes. It soon became apparent, however, that the collection was of historical interest (Dobson, 2004) and what follows is a more detailed description and evaluation of its contents. The cabinet almost certainly formed part of the Coleoptera collections amassed by Thomas George Bishop (1846-1922), obtained by the University of Glasgow as a gift from both his son and grandson in 1923 (anon., 1923; Fergusson, 1930). During the process of accepting this gift Professor J.G. Kerr visited the Bishops' house in Helensburgh in that year and made notes and a sketch plan marking the position of each cabinet preparatory to moving them to Glasgow. Item 7 was a cabinet of 32 drawers containing a collection of British Coleoptera, a description which matches the collection under discussion here and is the one cabinet not currently in the Zoology Museum. The collection contains rather more than 17,500 specimens and although it has a wide range of British Coleoptera is far from complete. Nine of the 96 families designated in Pope (1977) are unrepresented and, of those, the staphylinids are the most conspicuous by their absence. If this group had formed part of the original collection then it must have been lost or stored elsewhere. Losses have occurred also due to deterioration of specimens, often by verdigris of the pins. One drawer had lost its glass lid and most of its contents were missing.

Although many taxonomic changes have been made since the publication of the British checklist (Pope, 1977) it is still the most useful generally available account and so the collection was rearranged and named accordingly. This list and the monograph of Fowler (1887-1891) enabled most problems of synonymy to be resolved. Some 67% of the (non-staphylinid) species listed by Pope (1977) are represented. As many additions have been made to the fauna during the last century and a half a fairer comparison might be made with the contemporary list of Waterhouse (1858) and compared to this there is 88% representation.

The basic layout of the collection does actually use Waterhouse (1858) as a label list but a number of manuscript labels are also present. These were written in a very precise hand that has been identified by Mr Richard Thompson of The Natural History Museum, London, as that of James F. Stephens (1792 -1852), author of *A Manual of British Coleoptera or Beetles* (1839). Stephens described numerous new genera and species and a collection of his is preserved in London allowing direct comparison with the hand writing here in Glasgow. The curlicues on the lower case letters of his handwriting are quite characteristic (Fig. 1a-d). This clearly dates the collection from early in the nineteenth century. Some specimens bear labels detailing collector, location and date or various combinations of these in the typically minimalist style of documentation of that period. The rest lack labels altogether or bear variously shaped or coloured ones many of which carry numbers or letters probably relating to data kept in long-lost record books.

Various identifiable named collectors contributed specimens. One label indicates that a collection of water beetles of Samuel Stevens (1817-1899) may once have been incorporated. It reads "S. Stevens's private collection of water beetles placed here previous to rearrangement". The numbers present today are too low for this to remain credible. Many other beetles originally present appear to have been dispersed through other parts of T.G. Bishop's cabinets and storeboxes as can be seen in the Hunterian Museum. Specimens labelled "ex Stevens" are evidence that Bishop got such material and used them to fill gaps in his own series. At least eighteen nineteenth century collectors are represented sometimes by examples of rare species.

Fig 1a

argillaceus. Gyl
incratus. Brit. C.

b

Brevis. Scho

c

nodulosus. Gyll.

d

25 *Aethiops*.

Fig 3

Arundin
No 50
Feb 4. 1842

Fig 2

Taken
no.
Hammersmith
July 1837

Fig 4

Endophloeus
Spinulosus 2/2
N. Frost-Turner

Fig 5

Monstrosity
Taken at
Hammersmith
with 3 Antenna

Fig 6



Fig. 1, a-d. Three examples of the cabinet labels in handwriting of J. F. Stephens (1792 –1852) plus an authenticated example ‘Aethiops’ from Horn & Kahler, Plate XI, Fig. 25, (1935-1937).

Fig. 2. Specimen label of *Phymatodes testaceus* in handwriting of Samuel Stevens (1817-1899).

Fig. 3. Specimen label of *Brachysoma hirtus* in handwriting of Samuel Stevens (1817-1899).

Fig. 4. Specimen label of *Endophloeus markovichianus* in handwriting of Samuel Stevens (1817-1899)

Fig. 5. Specimen label of *Prionychus ater* in handwriting of Samuel Stevens (1817-1899).

Fig. 6. Specimen of *Prionychus ater* showing branched antenna.

The chief of these are Dr John Arthur Power (1810-1886), 39 species; John Walton (1784-1863), 26 species; Charles Turner (c.1808-1868), 23 species and Rev. William Little (of Dumfries, died 1867), 21 species. Others, in alphabetical order, are James Alexander Brewer (died c.1890), George Charles Champion (1851-1927), Rev. Hamlet Clark (1823-1867), Dale either James Charles (1792-1872) or C. William (ca. 1852-1906), John Frederic Dawson (1802-1870), Thomas Desvignes (1812-1868), Rev. William Weeks Fowler (1848-1923), Mr Greville (either Robert Kaye Greville (1794-1866) or Robert Northmore Greville his son, (active c.1839-1853), Thomas Coulthard Heysham (1792-1857), James H. Keys (1855-1941), Henry Moncreaff (active, 1873, biographical dates unknown; name appears to have been spelt Moncreif possibly by mistake and not to be confused with Thomas Moncreiffe, a Perthshire lepidopterist), Edward Saunders (1848-1910), Frederick Smith (1805-1879), James Francis Stephens (1792-1852), Samuel Stevens (1817-1899), James John Walker (1851-1939), George Robert Waterhouse (1810-1888), John Obadiah Westwood (1805-1893), a Mr White and Theodore Wood (1862-1923).

Contributors are sometimes designated on the labels by their names in full but often just initials or abbreviations are used e.g. Dr P for Power, GCC for Champion, Tr or T for Turner, GRW for Waterhouse and SS for Stevens. Less obvious cases could sometimes be resolved from other labels or by reference to Fowler (1887-1891). The collection contains numerous species of particular interest in that they are rarities or have data that correspond with records in Fowler. These include specimens of *Orsodacne lineolata*, *Phymatodes testaceus* (Fig. 2) and *Brachysoma hirtus* (Fig. 3) whose data correspond directly to those of S. Stevens. The overall feeling is that the cabinet is of a collector who was able to obtain numerous duplicates from the prolific collectors of the middle years of the nineteenth century. The core arrangement of the collection had considerable initial input from J.F. Stephens and many subsequent additions were made by Samuel Stevens before being acquired by Bishop.

The famous Stevens Auction Rooms that sold so many collections of insects in London was a family business and Samuel was involved with its organization and so had ample opportunity to acquire rare specimens that came in for sale (anon, 1899). Bishop bought actively at auctions and used these collections to enhance his own series. By some means he got this collection with its many Stevens' specimens; most probably in the form of this 32-drawer cabinet.

The following list details some of the more interesting specimens. These are selected on the basis of representing unusual records based on contemporary accounts of their distribution and of their collectors. Knowledge of the taxonomy and distribution of the British coleopteran fauna has increased considerably since then but this is not discussed. A verbatim

transcription of the label data, including some outdated spellings of place names, is given within double inverted commas; an oblique stroke separates lines of text. This is followed by relevant comments derived from Fowler (1887-1891), Stephens (1839) and Curtis (1839). Inferred data are in square brackets. Old collection records can be of considerable potential interest but are often tantalisingly bereft of detail.

Carabidae

Carabus intricatus L. "The six above specimens all from Woods near Plymouth", a cabinet label in J.F. Stephens' hand. There are only three specimens in the drawer and one has a radically different pin from the others, being thinner and gilt. This species is rare, confined to the S.W. district bordering on Dartmoor (Curtis, 1839, Stephens, 1839; Fowler, 1887).

Amara strenua Zimmermann. "Isle of Wight." The only authentic locality is near Ryde, Isle of Wight (Fowler, 1887).

Harpalus cordatus (Duftschmidt). "Reigate". Rare, recorded from Reigate by Champion (Fowler, 1887).

Anisodactylus nemorivagus (Duftschmidt). "Chobham / Surrey, G.C.C[hampion]" (a printed label). Rare, Saunders and Champion recorded it from Chobham as *binotatus* var. *atricornis* Stephens (Fowler, 1887).

Diachromus germanus (L.). "Esplanade / St. Leonards / 8/1860". Very rare according to Fowler (1887) who lists St Leonards as a locality; now believed to be extinct (Lindroth, 1974). Another specimen labelled "Hastings/1867". Curtis (1839) gives Kingsbridge, Devon, and near Bristol.

Histeridae

Halacritus punctum (Aubé). "Hayling Is / J.J.W[alker]". There are two identically labelled specimens in T.G. Bishop's own British beetle cabinet in the Hunterian Museum. Very local according to Fowler (1889, as *Acritus*) who quotes Hayling Island.

Geotrupidae

Odontaeus armiger (Scopoli). One female "Race Course / Brighton / August 1, 1871". Very rare (Fowler, 1890) as *Odontaeus mobilicornis* (Fabr.). This capture does not appear to be mentioned in any contemporary literature. According to Jessop (1986) *females* have only been recorded from late June to late July. The present record may slightly extend the flight period, although of course, the individual may have been dead when found.

Scarabaeidae

Oxythrea funesta (Poda). "Deal / June 1845". Doubtfully British according to Fowler (1890), as *stictica* (L.), who lists several scattered sightings including one near Manchester. Not included by Pope (1977) but Jessop (1986) notes that Allen (1967) cites several records from Lancashire. Curtis (1839) gives Windsor and Chichester.

Polyphylla fullo (L.). One specimen with label adhered to underside "British / Mr Waterh". Separate label, lower down pin, "Found on Deal / Sand Hills dead". This is an old specimen with three holes, two in the right elytron and one through the scutellum, where once pins may have been located and rusted away. It is now pinned through the left side. Antennae and legs

are missing apart from the fore femora and it is generally dishevelled, possibly the state in which it was collected. The retention of this specimen, despite its poor condition, is probably linked to its rarity as a provenanced British example of this species. Records from this part of England include the finding of 8 specimens at Sandwich in 1815 (Fowler, 1890). These and other records from this stretch of coast were discussed by Allen (1967) who quite convincingly suggests that this area provides the right habitat for *P. fullo* and that it was likely to have been resident there. The latest recorded capture from Britain was in 1902 when one was collected from St. Leonard's Sussex but Jessop (1986) regards this as a probable importation. It seems reasonable to suppose that for some unknown reason the species ceased to be a resident in Britain during the early part of the nineteenth century. Curtis (1839) quotes Sandwich, Deal and Dover and also states that 'the late Mr Francillon said they issued from the sand, mount into the air and disappear' which may have been an observation of adults emerging from their pupae.

Anisoplia crucifera (Herbst) (= *A. agricola* (Poda)). One specimen labelled "South Wales / 1844". Stephens (1839) lists and describes this species (as *A. agricola*) and quotes records from the coasts of S. Wales and Newcastle. Curtis (1839) refers to the record from South Wales as the capture of a living example on the coast at "Caermarthen" [Carmarthen]. The species has also been reported from England (Ohaus, 1915) and the status of this record was discussed by Allen (1967) under another synonym *cyathigerum* Scopoli. There are three other specimens standing in the collection under this name. Two are unlabelled but the third has a manuscript label 132/1. Only the first example shows the characteristic markings detailed by Stephens (1839) and has the whole of the scutellum densely punctured. These others are coloured differently and have the scutellum sparsely punctured at the base only; their identity still needs to be established. *A. crucifera* is not listed by Pope (1977).

Buprestidae

Anthaxia nitidula (L.). "N. Forest, T[urner], 6.53". Very rare, taken near Brockenhurst by Turner, Power and others (Fowler, 1890). Curtis (1839) states that it was first found in Britain by himself and Mr Dale in the New Forest, early June 1824.

Agrilus sulcicollis Lacordaire (det. Brian Levey, 2005). "New species / Hammth". An alien species which possibly arrived through the Thames docks but the apple orchards of the time around Hammersmith produced interesting records such as *Prionychus ater* and *Phymatodes testaceus* (see below). The record of this *Agrilus* has not appeared in any contemporary or subsequent literature even as an adventive.

Elateridae

Ampedus nigrinus (Herbst) "Rannock / Foxcroft" Two specimens from [J] Foxcroft (active 1850s), an enigmatic figure whose name is credited in connection with a number of Scottish specialities.

Cardiophorus asellus Erichson "Mr Curtis". Although this specimen was evidently obtained from

Curtis there are no other data. Very local and as a rule rare (Fowler, 1890).

C. ruficollis (Linn.), det. H. Mendel. This bears an almost unreadable label which appears to be "Mr Champion. Coln". There are no other data. The species was recorded by Stephens (1839) from decaying oaks near London and in Norfolk, records repeated in Fowler (1890).

Melanotus erythropus (Gmelin) or *M. castaneipes* (Paykull). Now regarded as two species but difficult to distinguish at the limits of their range and both species may be present in Britain (pers. comm., H. Mendel, 2006). "On a Willow Tree / Totenham / july 1860 J.S."; "C.Turner / Au 1862 / new / forest". Fowler (1890) cites only a few localities including the New Forest.

Anostirus castaneus (L.). "British / South / Wales". One specimen labelled out of six which are all identical in style. Very rare, Monmouth amongst other places (Fowler, 1890, as *Corymbites*).

Drasterius bimaculatus (Rossi) "Mr Stewart / Dorsetshire" Not included by Pope (1977). This specimen was determined by H. Mendel, 2006, who considers it to be a doubtful British species whose range in continental Europe extends from Belgium to Italy and from the Iberian Peninsula to Russia. It is fully winged so this single specimen could have been a stray from the continent. However, it should be borne in mind that some collectors obtained foreign examples of rarities for their collections without adequately distinguishing them from native caught ones.

Eucnemidae

Dirhagus pygmaeus (Fabr.). "N. Forest / Turner / June 1855". Three specimens on separate mounts. Very rare, Fowler (1890, as *Microrrhagus pygmaeus* (Fabr.)) quotes Turner as having recorded this species from the New Forest.

Cantharidae

Cantharis figurata Mannerheim. "Rannock / Turner / 1860" on circular white label. Single specimen conforms to *scotica* Sharp which was not described until 1866 but is now considered to be a synonym of *figurata*. Fowler (1890), as *Telephorus figuratus* Mannh., mentions locality.

Lycidae

Platycis minutus (Fabr.). "Mendip Hills / Wearing / Sep/55"; "C.G. (?) Reed / Sept.14/64 / Bristol". Local according to Fowler (1890) who mentions Leigh Woods as a Bristol locality.

Anobiidae

Dorcatoma chrysomelina Sturm. "Hyde Pk Aug 60" "Dunham Park / 1874 / SS [?]" Three specimens are split between two similar cards. Fowler (1890) quotes records from Hyde Park (S. Stevens) and Dunham Park (near Manchester), collected by Chappell.

Cleridae

Tillus elongatus (L.). "in Cop, / june 1862, / Campdon Town, / JS". A pair on one card. Not common (Fowler, 1890); Stephens (1839) has Camberwell as a London locality.

Trichodes apiarius (L.). "Tunbridge Wells / June 41". A rarity, doubtfully indigenous (Fowler, 1890). Now listed as extinct (Pope, 1977).

Cisidae

Rhopalodontus perforatus (Gyllenhal). “Rannoch / Turner / 1860”, nine specimens mounted on three cards (1, 2 and 6). Very rare, both locality and collector quoted by Fowler (1890).

Colydiidae

Endophloeus markovichianus (Pill. & Mitt.). “New Forest / Turner” (below card); “Endophloeus spinulosus 3/62 / N.Forest Turner” (Fig. 4). Two specimens are in the C.W. Dale collection in Oxford University similarly labelled (Walker, 1932). Very rare, New Forest was the only known locality and described as one of Charles Turner’s great finds (Fowler, 1889, as *spinulosus*). Fowler claimed to have the original specimen labelled “New Forest, Mar 3 1862”. There are also six unlabelled specimens.

Tenebrionidae

Prionychus ater (Fabr.). “Monstrosity (sic) / taken at / Hammersmith / with 3 Antenna” (Fig. 5). Handwriting associated appears to be that of S. Stevens. The left antenna is actually branched (Fig. 6). This species is very local and usually rare. Recorded at Hammersmith from old apple trees by S. Stevens (Fowler, 1891, as *Eryx*).

Tetratomidae

Tetratoma ancora Fabr. “Mr Greville/ Nr.Edinboro”. Rare, occurs in Forth district (Fowler, 1891).

Salpingidae

Rabocerus gabrieli Gerhardt. “Mr Little / Scotland” and another “Mr Little”. Rare but numerous localities noted by Fowler (1891) as *Salpingus foveolatus* Ljungh.

Pytho depressus (L.). “Scotland / Rannoch / Mr Weaver/ June 1858”;

“Rannoch / Turner / 1860”. Mr Weaver of Birmingham along with Dr Nelson of Lytham are quoted in Murray (1853) as having provided ‘the knowledge of interesting novelties taken in their researches in the Black wood Rannoch’.

Melandryidae

Xylita laevigata (Hellenius). “discolor Fab / Blk For. Perthshire / R. Weaver, 6/51”. Rare, only found in Scotland including Rannoch (Fowler, 1891).

Scaptidae

Scaptia testacea Allen. “New Forest / from / Rev WW Fowler” on reverse “*Scaptia / fuscula*”. This locality is mentioned by Fowler (1891). British authors mistakenly identified this species as *fuscula* Müller, P.W.J. until revised by Allen (1940).

Cerambycidae

Leptura scutellata Fabr. “C. Turner/new forest/Au 1862”. Rare but in some numbers in New Forest (Fowler, 1890).

Leptura sexguttata Fabr. “C.turner (sic)/new forest/ 1862”. One of only two known British localities (Fowler, 1890, as *Anoplodera*). Another undated but old specimen is labelled “Lincolnshire”.

Phymatodes testaceus (L.).

“Taken/nr/Hammersmith/July 1837” (Fig. 2). Rare, formerly taken on old fruit trees in Hammersmith by S. Stevens (Fowler, 1890, as *Callidium variabile*), South Lambeth (Stephens, 1839) and Battersea (Curtis, 1839) in a London context.

Anaglyptus mysticus (L.). “Camdon town /London / May 1862 / JS”; “C. Turner / Aug 1862 / new/ forest” Local, not uncommon in London District (Fowler, 1890 as *Clytus*).

Monochamus sutor (L.). “Cambridge 1887”. A common mainland European pest species of conifers. Very rare in Britain, probably an importation. Fowler (1890) lists several locations. Not in Pope (1977) but is in Kloet and Hincks (1945).

Monochamus sartor (Fabr.). “Garden, Kt. [Kent?] Rd./ June 1827 / FRG [?]”. Mainland European pest of conifers occasionally imported into Britain. The few records include London (Fowler, 1890). Not in Pope (1977) but is in Kloet and Hincks (1945).

Chrysomelidae

Orsodacne lineola (Panzer). one carded specimen labelled “*Orsodacna humeralis*” and on reverse “Norwood [oW18]/June 1887”; one older-looking specimen directly pinned “CWd [Coombe Wood?] / 1837”; one specimen labelled “Mr Walton” but no other data. Norwood record from June 1887 of var. *humeralis* Latr. and the Coombe Wood locality are both attributed to S. Stevens by Fowler (1890).

Cryptocephalus sexpunctatus (L.). “Mr Little”. Little was from Dumfries and Fowler (1890) gives this species as ‘Scotch’, very rare in Solway and Dumfriesshire.

Hydrothassa hannoveriana (Fabr.). Twelve specimens in pairs on cards, three pairs labelled “York”. According to Fowler (1890, as *hannoverana*) this species is rare, occurring at Askham Bryan and Fulford both near York.

Nemomychidae

Rhinomacer attelaboides Fabr. “Alvie Manse / J. 1865”; “Mr Greville / nr Edinburgh”; “Mr Little / Scotland”; “Rannoch / Turner1860” (four specimens). A very local northern species found at Alvie, Aviemore and elsewhere (Fowler, 1891).

Apionidae

Apion semivittatum Gyllenhal. “N.S. / Mr Walton / Margate 9/40” Extremely local, the only British record at that time was that of Walton who took it in abundance at Tivoli Gardens, Margate (Fowler, 1891).

Curculionidae

Caenopsis fissirostris (Walton). “Taken by myself in / a Gravel Pit on Plumpstead (sic) Common Sept. 3rd, 1841” [in Smith’s writing?]. According to Fowler (1891) rare, recorded from Plumstead by Smith. Note that this species was not described by Walton until 1847.

Cathormiocerus maritimus Rye. “Moncrief / 4/12/73”; “Mr Moncreaff, nr Portsmouth”. Extremely local, Portsmouth District, discovered by Mr Moncreaff in the salterns near Southsea where it was confined to several square yards (Fowler, 1891). This became the type locality.

Cathormiocerus socius Boheman. Pair on card “Mr Champ / ion / June 1887 / Sandown” and single specimen “Sandown, I.W. / RWL 7/98”. Extremely local: taken in numbers near Sandown by Champion (Fowler, 1891).

Barypeithes pellucidus (Boheman). Eleven specimens on two cards “T.Wood / Margate 6/86” and

"T.Wood / Margate / June/1886". Fowler (1891, as *Exomias*) gives this species as very local and as a rule rare but taken in large numbers (600) by T. Wood at Kingsgate (a suburb of Margate) in 1886.

Brachysomus hirtus (Boheman). "Arundel / Moss / Feb 6 1842". Very rare according to (Fowler, 1891) who cites this record from Arundel in moss, February 1842 by S. Stevens (Fig. 3)

Leiosoma oblongulum Boheman. "Leith Hill / May 1850" two carded pairs. Rare but perhaps overlooked 'Mr S. Stevens has a specimen taken at Leith Hill in 1850' (Fowler, 1891).

Leiosoma oblongulum s. troglodytes Rye. One carded example "J.J. W[alker] / 51 /Faversham". Fowler (1891) quotes Walker's Faversham site; *L. troglodytes* was described from Walker's material.

Magdalis carbonaria (L.). "Rannoch / Turner / 1860" Rare in Scotland (Fowler 1891).

Magdalis phlegmatica (Herbst). "Rannoch / Turner / 1860" Fowler (1891) cites Rannoch and states that this is a very local northern species.

Eremotes ater (L.). "Sherwood / C. Turner / April/55"; "Dr. P./390". Local and as a rule rare. Fowler (1891) gives Turner record (as *Rhyncolus*).

Ceutorhynchus mixtus Mulsant & Rey. "Newton Abbott / Dale", two specimens. Very rare according to Fowler (1891) who cites only two localities which yielded one specimen each. He regarded the species at the time as probably needing confirmation in Britain.

Scolytidae

Xyloterus domesticum (L.). "Rannoch / Turner / 1860". Four specimens on two cards. Fowler (1891, as *Trypodendron*) says it is rare in Scotland.

Pityogenes quadridens (Hartig). "Rannoch / Turner / 1860; "Dr. P. 397."Fowler (1891) regards this species as rare and quotes Turner's record.

Ips acuminatus (Gyllenhal). "Rannoch / Turner / 1860".Local, Fowler (1891, as *Tomicus*) quotes this locality.

Ips sexdentatus (Boerner). "Denton / Lancashire / 1874[?JS]". Denton is now part of Greater Manchester. Rare, (Fowler,1891 as *Tomicus*) mentions it as in some numbers at Dukinfield, Manchester, collected by Chappell.

Xyleborus dispar (Fabr.). "*Tomicus dispar* / N Forest Turner", three females on one card.

Fowler (1891) mentions the great rarity of males but has females from this source.

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